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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/770,960	01/26/2001	Jo Ann H. Squier	10247	7021
23455	7590	08/25/2004	EXAMINER	
EXXONMOBIL CHEMICAL COMPANY			SIMONE, CATHERINE A	
P O BOX 2149			ART UNIT	
BAYTOWN, TX 77522-2149			PAPER NUMBER	
			1772	

DATE MAILED: 08/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/770,960	SQUIER ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Catherine Simone	1772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 06 August 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                         |                                                                             |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                                |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____                                                             | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/6/04 has been entered.

***Withdrawn Rejections***

2. The 35 U.S.C. 102 rejection of claims 1-4, 7, 10-13, 16, 20, 22, 23 and 24 as being anticipated by Liu et al. of record in the Office Action mailed 8/4/03, Pages 2-3, Paragraph #5 has been withdrawn due to the Applicant's amendment filed 4/27/04.
3. The 35 U.S.C. 103 rejection of claims 14, 15, 17-19 and 21 over Liu et al. of record in the Office Action mailed 8/4/03, Pages 6-7, Paragraph #9 has been withdrawn due to the Applicant's amendment filed 4/27/04.
4. The 35 U.S.C. 103 rejection of claims 25 and 26 over Bright in view of Poirier of record in the Office Action mailed 8/4/03, Pages 7-8, Paragraph #10 has been withdrawn due to the Applicant's amendment filed 4/27/04.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. **Claims 1-3, 11, 12, 14-16, 20 and 24** are rejected under 35 U.S.C. 102(b) as being anticipated by Duncan (4,701,369).

Regarding **claims 1 and 24**, Duncan discloses a thermoplastic label for use with a cold glue adhesive comprising a first skin layer comprising a thermoplastic (polypropylene) and a first cavitating agent, wherein the first skin layer has a first side and a second side, and the first skin layer is cavitated (see col. 7, lines 12-24) and a cold glue adhesive on the first side of the first skin layer (see col. 7, lines 65-66). Regarding **claim 2**, note the thermoplastic is polypropylene (see col. 3, line 22). Regarding **claim 3**, note the thermoplastic is polyethylene (see col. 2, line 66). Regarding **claim 11**, note the first skin layer comprises at least about 15% by weight of the thermoplastic label (see col. 6, lines 64-65). Regarding **claim 12**, note the first cavitating agent is selected from the group consisting of polyamides, nylons, polyesters, acetals, acrylic resins, solid or hollow pre-formed glass spheres, metal beads, ceramic spheres, metal spheres (see col. 5, lines 14-19). Regarding **claims 14 and 15**, note the label has a thickness from about 3 mils to about 5 mils and from about 1 mil to about 10 mils (see col. 6, line 47). Regarding **claim 16**, note the label is biaxially oriented (see col. 3, lines 33-34). Regarding **claim 20**, note the thermoplastic is polypropylene and the polypropylene comprises homopolymer polypropylene (see col. 2, lines 67-68).

7. **Claims 1-4, 7 and 10-24** are rejected under 35 U.S.C. 102(b) as being anticipated by Swan et al. (4,965,123).

Regarding **claims 1 and 24**, Swan et al. discloses a thermoplastic label for use with a cold glue adhesive comprising a first skin layer comprising a thermoplastic (polypropylene) and a first cavitating agent, wherein the first skin layer has a first side and a second side, and the first skin layer is cavitated (see col. 8, lines 5-15 and lines 34-38) and a cold glue adhesive on the first side of the first skin layer (see col. 9, lines 15-39). Regarding **claim 2**, note the thermoplastic is polypropylene (see col. 11, lines 10-12). Regarding **claim 3**, note the thermoplastic is polyethylene (see col. 8, lines 34-37). Regarding **claim 4**, note a core layer comprising polypropylene and a second cavitating agent (see col. 5, lines 20-25) wherein the core layer has a first side and a second side and the first side of the core layer is adjacent to the second side of the first skin layer. Regarding **claim 7**, note a second skin layer comprising polypropylene having a first side and a second side wherein the first side of the second skin layer is adjacent to the second side of the core layer (see col. 11, lines 10-13 and col. 12, lines 10-12). Regarding **claim 10**, note the core is cavitated (see col. 11, lines 53-65). Regarding **claim 11**, note the first skin layer comprises at least about 15% by weight of the thermoplastic label (see col. 11, lines 3-6). Regarding **claims 12 and 13**, note the first cavitating agent is calcium carbonate (see col. 8, lines 12-15). Regarding **claims 14 and 15**, note the label has a thickness from about 3 mils to about 5 mils and from about 1 mil to about 10 mils (see col. 7, lines 4-7). Regarding **claim 16**, note the label is biaxially oriented (see col. 11, line 18). Regarding **claims 17-19**, note the first cavitating agent comprises at least about 25%, 35% and 50% by weight of the first skin layer (see col. 8, lines 21-24). Regarding **claim 20**, note the thermoplastic is polypropylene and the polypropylene

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comprises homopolymer polypropylene (see col. 8, lines 34-38). Regarding **claim 21**, note the thermoplastic is polypropylene and the polypropylene comprises homopolymer polypropylene (see col. 8, lines 34-38) and wherein the cavitating agent comprises at least about 25% by weight of the first skin layer (see col. 8, lines 21-24). Regarding **claim 22**, note the second cavitating agent is selected from the group consisting of polyamides, polybutylene terephthalate, acrylic resins, acetals, solid or hollow preformed glass spheres, metal beads or spheres, ceramic spheres (see col. 6, lines 41-49 and 62-65). Regarding **claim 23**, note the second cavitating agent is polybutylene terephthalate (see col. 6, lines 41-43).

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. **Claims 1-3, 14, 15, 24 and 25** are rejected under 35 U.S.C. 102(e) as being anticipated by Dronzek, Jr. (6,517,664).

Regarding **claims 1 and 24**, Dronzek, Jr. discloses a thermoplastic label for use with a cold glue adhesive comprising a first skin layer comprising a thermoplastic (polypropylene) and a first cavitating agent, wherein the first skin layer has a first side and a second side, and the first skin layer is cavitated (see col. 9, lines 55-57 and col. 10, lines 33-35) and a cold glue adhesive on the first side of the first skin layer (see col. 7, lines 61-67 and col. 8, lines 1-4). Regarding **claim 2**, note the polypropylene skin layer has a thickness of at least about .3 mil (see col. 9, line 56). Regarding **claim 3**, note the thermoplastic is polyethylene (see col. 5, lines 15-19).

Regarding **claims 14 and 15**, note the label has a thickness from about 3 mils to about 5 mils and about 1 mil to about 10 mils (see col. 9, lines 25-27 and 55-57).

Regarding **claim 25**, Dronzek, Jr. discloses a container having a thermoplastic label comprising a surface of the container; a cold-glue adjacent to the surface (see col. 10, lines 45-57 and col. 12, lines 15-24); a label comprising a first skin layer comprising polypropylene and a first cavitating agent (see col. 5, lines 15-16) wherein the first skin layer has a first side and a second side and the first skin layer is cavitated and the first side is adjacent to the cold glue (see col. 12, lines 15-24).

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. **Claims 5, 6, 8 and 9** are rejected under 35 U.S.C. 103(a) as being unpatentable over Swan et al. (4,965,123) in view of Marotta et al. (5,888,640).

Swan et al. discloses a thermoplastic label for use with a cold glue adhesive comprising a first skin layer comprising a thermoplastic (polypropylene) and a first cavitating agent, wherein the first skin layer has a first side and a second side, and the first skin layer is cavitated and a cold glue adhesive on the first side of the first skin layer and further a cavitated core layer and a second polypropylene skin layer. However, Swan et al. fails to disclose a tie layer comprising polypropylene wherein the tie layer has a first side and a second side and the first side of the tie layer is adjacent to the second side of the first skin layer and a metal layer on the second side of

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the second skin layer. Marotta et al. teaches that it is old and well-known in the analogous art to have a tie layer comprising polypropylene adjacent a first skin layer (see col. 6, lines 12-14 and 20) and a metal layer on the second side of a second skin layer (see col. 8, lines 31-32) for the purpose of producing a biaxially oriented thermoplastic label to be adhered to a container.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have provided the label in Swan et al. with a tie layer comprising polypropylene wherein the tie layer has a first side and a second side and the first side of the tie layer is adjacent to the second side of the first skin layer and a metal layer on the second side of the second skin layer as suggested by Marotta et al. in order to produce a biaxially oriented thermoplastic label to be adhered to a container.

12. **Claims 4-10, 22 and 23** are rejected under 35 U.S.C. 103(a) as being unpatentable over Duncan (4,701,369) in view of Marotta et al. (5,888,640).

Duncan discloses a thermoplastic label for use with a cold glue adhesive comprising a first skin layer comprising a thermoplastic (polypropylene) and a first cavitating agent, wherein the first skin layer has a first side and a second side, and the first skin layer is cavitated (see col. 7, lines 12-24) and a cold glue adhesive on the first side of the first skin layer (see col. 7, lines 65-66) and further a polypropylene core layer (see col. 2, lines 65-67) and a second skin layer comprising polypropylene (see col. 3, lines 19-22). However, Duncan fails to disclose a cavitated core layer, a tie layer comprising polypropylene adjacent to the second side of the first skin layer and a metal layer on the second side of the second skin layer. Marotta et al. teaches that it is old and well-known in the analogous art to have a tie layer comprising polypropylene adjacent a first skin layer (see col. 6, lines 12-14 and 20) and a metal layer on the second side of a second skin



layer (see col. 8, lines 31-32) and a cavitated core layer (see col. 5, lines 55-64) for the purpose of producing a biaxially oriented thermoplastic label. Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have provided the label in Duncan with a cavitated core layer, a tie layer comprising polypropylene adjacent to the second side of the first skin layer and a metal layer on the second side of the second skin layer as suggested by Marotta et al. in order to produce a biaxially oriented thermoplastic label.

13. **Claim 26** is rejected under 35 U.S.C. 103(a) as being unpatentable over Dronzek, Jr. (6,517,664) in view of Swan et al. (4,965,123).

Dronzek, Jr. discloses a container having a thermoplastic label comprising a surface of the container; a cold-glue adjacent to the surface (see col. 10, lines 45-57 and col. 12, lines 15-24); a label comprising a first skin layer comprising polypropylene and a first cavitating agent (see col. 5, lines 15-16) wherein the first skin layer has a first side and a second side and the first skin layer is cavitated and the first side is adjacent to the cold glue (see col. 12, lines 15-24). However, Dronzek, Jr. fails to disclose a core layer comprising polypropylene and a second cavitating agent having a first side and a second side wherein the first side of the core layer is adjacent to the second side of the first skin layer. Swan et al. discloses a cavitated core layer comprising polypropylene adjacent a cavitated polypropylene skin layer (see col. 5, lines 21-25) for the purpose of producing a thermoplastic label to be adhered to a container surface. Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have provided a cavitated polypropylene core layer adjacent the cavitated polypropylene skin layer in Dronzek, Jr. as suggested by Swan et al. in order to produce a thermoplastic label to be adhered to a container surface.

***Response to Arguments***

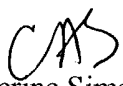
14. Applicant's arguments with respect to claims 1-26 have been considered but are moot in view of the new ground(s) of rejection.

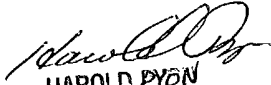
***Conclusion***

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Catherine Simone whose telephone number is (571)272-1501. The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on (571) 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Catherine Simone  
Examiner  
Art Unit 1772  
August 13, 2004

  
HAROLD PYON  
SUPERVISORY PATENT EXAMINER  
1772

8/18/04